

Date: Thu, 27 May 93 09:28:45 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #648  
To: Info-Hams

Info-Hams Digest                      Thu, 27 May 93                      Volume 93 : Issue    648

Today's Topics:

                    An interesting New-Ham story  
Austin 500C 2m/70cm mobile antenna (was Re: Want 2M/70CM antenna ideas for Caravan)

                    Buying radios without a license  
                    Call Sign Server, Where?  
Intermod/spurious sigs a common HT problem?  
                    J.C. Whitney  
                    printed circuit assembly  
Question: Can a novice take the extra test?  
                    RACES Bulletin #274

                    Some advice on soldering coaxial cable  
                    WANTED: NOAA/SAT INFO (2 msgs)  
                    Wanted: QSL route for P02CRL  
                    xraying HTs (was airlines) (2 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 27 May 93 08:50:01 CDT  
From: timbuk.cray.com!hemlock.cray.com!cherry10!dadams@uunet.uu.net  
Subject: An interesting New-Ham story  
To: info-hams@ucsd.edu

In article 18991@hemlock.cray.com, dadams@cray.com (David Adams) writes:  
|In article AA07427@ucsd.edu, 4311@cpf.navy.mil (CDR Fred W. Brunson) writes:  
||  
||Rajiv, I appreciate your friends modesty but he would serve the

||Amateur community more by allowing the press to write the story  
||up and distribute it as another success story of Amateur Radio  
||providing a vital lifesaving service in the pinch. In any case,  
||thanks for sharing it with us.  
||  
||Fred, WH6ME, 4311@CPF.NAVY.MIL  
|  
|On the other hand, I can't see why it can't be shared anonymously.  
|They could even do it up on "911" without naming the persons involved.  
|  
|---  
|--David C. Adams Statistician Cray Research Inc. dadams@cray.

On the first hand, I suppose they can't use it on "911" because nobody  
ever called 911, and the show exist to demonstrate how brave and  
courageous the people are who make 911 work. ;^)

---  
--David C. Adams Statistician Cray Research Inc. dadams@cray.com  
-Sourdough and Ham- NOWWN

Old Cowboys never die. They just smell that way!

-----  
Date: 27 May 93 14:23:35 GMT  
From: usc!howland.reston.ans.net!gatech!concert!duke!news.duke.edu!  
ee.egr.duke.edu!jbs@network.UCSD.EDU  
Subject: Austin 500C 2m/70cm mobile antenna (was Re: Want 2M/70CM antenna ideas  
for Caravan)  
To: info-hams@ucsd.edu

In article <1993May25.210858.26102@rsg1.er.usgs.gov> tbodoh@resdgs1.er.usgs.gov  
(Tom Bodoh) writes:

>  
>--  
>I am just getting started in Ham radio and have a question regarding mobile  
>antennas. I am looking for ideas on what type of mobile dual band (2M/70CM)  
>antenna to use on my Dodge Caravan - given that it must clear a garage door  
>daily (with about 16" clearance). Would a 5/8 wave cowl mount be best or  
>would a bumper/tailgate mount be good. Could anyone with a Caravan/Voyager  
>comment on how they resolved this? I plan on using the antenna for my HT  
>until I buy a dual band mobile rig. Most of my travel is on the plains of  
>South Dakota and Minnesota. Thanks...

If you could drop your suspension 3" or let some air out of your tires ;-),  
you could use the Austin 500C... it's about 19" high. It's somewhat

flexible, but you probably wouldn't want to run it into your garage every night if the clearance is 3" too low.

So, this isn't quite what Tom was asking for. Regardless, I wanted a chance to comment on the Austin anyway. It's under \$30, and quite a few of the guys in our radio club have them and we all like them very much. Mine does not approach the 2m 5/8 mag-mount in effectiveness, but it's much better than my old 2m 1/4 wave mag-mount and much, MUCH better than my old 2m/70cm cellular-look mag-mount. I've got it on an NMO mount through the center of the roof.

When I was looking for a mobile dual-band antenna, some of the guys in my other radio club said the Maxrad was definitely the way to go. Well, I bought the Austin anyway and the other day got a chance to compare the two from the same antenna mount. The Maxrad is, I seem to remember, about 5" longer than the Austin 500C; I brought up a moderately distant 2m repeater with each antenna and the Maxrad showed a received signal strength of about 2 s-units more than the Austin. However, when I brought up a moderately distant 440 repeater, the Austin showed about 6 s-units stronger a signal than the Maxrad. Given the Austin's shorter length and its still quite effective 2m range, I think the higher apparent gain on 440 makes the Austin a better deal for anyone who works 440 mobile (I think the Maxrad goes for well over \$50). Mine came perfectly tuned for 2m out of the box, with a very low SWR across the entire band. I don't have a meter that will measure SWR at 440MHz, but if I get the chance to check it and find it less than satisfactory I'll post that information.

Tom, you may want to look into the Comet and Diamond antennas. One of them (I forget which) makes almost all their mobile antennas with a joint near the base that can be folded over for getting under low overhangs.

-joe KD4LLV

--

You spend the night  
Like you were spending a dime  
- Lyle Lovett

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Date: 27 May 93 09:22:12 CDT  
From: timbuk.cray.com!hemlock.cray.com!cherry10!dadams@uunet.uu.net  
Subject: Buying radios without a license  
To: info-hams@ucsd.edu

In article 1787700033@trsvax, rpo@trsvax.tandy.com () writes:

|

|One other thing I did not originally post...a few years ago,  
|one of the major ham outlets was sued for refusing to sell to  
|someone who could not produce a license. They lost...

Who lost?

(Is this confusing?)

---

--David C. Adams Statistician Cray Research Inc. dadams@cray.com  
-Sourdough and Ham- NOWWN

Old Cowboys never die. They just smell that way!

-----  
Date: 27 May 1993 10:49:10 -0400  
From: netnews!panix!panix!not-for-mail@nyu.arpa  
Subject: Call Sign Server, Where?  
To: info-hams@ucsd.edu

try: telnet ham.njit.edu 2000

It's a domestic (USA) callsign server courtesy of WG2W and NJIT.

--

----- Andrew Funk, KB7UV -----  
| Chair, Radio Amateur Telecommunications Society (RATS) |  
| ENG Editor/Microwave Control, WCBS-TV Channel 2 News, New York |  
| Internet: kb7uv@panix.com Packet: kb7uv@kb7uv.#nli.ny.usa |

-----  
Date: Thu, 27 May 1993 11:29:26 GMT  
From: usc!howland.reston.ans.net!europa.eng.gtefsd.com!emory!kd4nc!ke4zv!  
gary@network.UCSD.EDU  
Subject: Intermod/spurious sigs a common HT problem?  
To: info-hams@ucsd.edu

In article <1u0vbt\$fan@techbook.techbook.com> genew@techbook.techbook.com (Gene Wolford) writes:

>Thanks for the feedback on my original request. I guess I am not suprised  
>that a HT is a poor substitute for a true base or mobile rig. However, In  
>the era of President and Mr. Clinton I can't really justify buying all at  
>once. Maybe the true question is: Can I get by with a (W21at/TH-88a/FT-530)  
>until more funds are available. If I stick a 2m beam up to hit the repeater  
>from my house is my HT going to sound like a bad night on the  
>Childrens Band, aka CB, due to spurious/intermod?  
>Will my HT sound like a buzz saw from hell if I connect it to a external

>magnetic mount antenna on my car/motorcycle?

At the end of Billary's single term, your money will be worth less, everything will cost more, and you'll be making less if you're lucky enough to be employed. Buy now while you can.

Now on to the technical question. The answer, like most things, is that "it depends." If you are in a low RF area, IE not near a major urban area, then the HT will likely be fine. On the other hand, if you do live in a congested high RF area, it will truly suck. Your best course is to buy the HT from a dealer who will exchange it for a mobile rig if there's a problem.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: Thu, 27 May 1993 13:31:38 GMT  
From: swrinde!cs.utexas.edu!zaphod.mps.ohio-state.edu!darwin.sura.net!news-feed-1.peachnet.edu!concert!uvaarpa!murdoch!uvacs.cs.Virginia.EDU!  
rar3h@network.UCSD.EDU  
Subject: J.C. Whitney  
To: info-hams@ucsd.edu

I remember reading a few days ago about someone seeing what appeared to be a piece of ham radio equipment advertised in a J.C. Whitney catalog. Could someone please tell me the catalog number and page where it was seen. I cant seem to find it. Better yet.. I'd really like it if someone could FAX me a copy of the ad.

Thanks  
Bob Ross  
WA2MFI  
rar3h@virginia.edu

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Date: Thu, 27 May 1993 13:54:26 GMT  
From: swrinde!cs.utexas.edu!zaphod.mps.ohio-state.edu!darwin.sura.net!  
jhunix.hcf.jhu.edu!bogus.sura.net!news-feed-1.peachnet.edu!concert!uvaarpa!  
murdoch!usenet@network.UCSD.EDU  
Subject: printed circuit assembly

To: info-hams@ucsd.edu

Has anybody heard of legitimate companies offering  
printed-circuit board assembly work to be done from  
one's home? I have been wading through many rip-offs.

-Jon Lingel KA4EZV

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Date: Thu, 27 May 1993 15:54:26 GMT  
From: usc!howland.reston.ans.net!agate!news.ucdavis.edu!othello.ucdavis.edu!  
ez006683@network.UCSD.EDU  
Subject: Question: Can a novice take the extra test?  
To: info-hams@ucsd.edu

lwolfgan@arrl.org (Larry Wolfgang) writes:

:  
: The sixth edition of the ARRL/VEC Volunteer Examiner Manual addresses this,  
: by saying, "At the team's discretion, elements may be administered out of  
: order." (page 55) Unfortunately (at least IMHO) the manual also states,  
: "we would still recommend that the examinee must first retake the failed  
: element and pass it before proceeding to take a higher examination element."  
: (page 51)  
:

When my girlfriend took her no-code she had to take the novice portion  
twice. The VE (ARRL) made her pay another testing fee to retake the  
element. Is this the VE's decision or does the VEC send down the word on  
element retesting fees. Someone else said they had to retake another  
element and said they didn't charge him the testing fee twice.

Dan

--

\*-----\*  
\* Daniel D. Todd           Packet: KC6UUD@WA6RDH.#nocal.ca.usa           \*  
\*                           Internet: DDTODD@ucdavis.edu               \*  
\*                           Snail Mail: 1750 Hanover #102             \*  
\*                           Davis CA 95616                           \*  
\*-----\*  
\*       I do not speak for the University of California....       \*  
\*       and it sure as hell doesn't speak for me!!               \*  
\*-----\*

-----  
Date: 16 May 93 17:55:34 GMT  
From: equalizer!sdcrsi!network.ucsd.edu!news-mail-gateway@network.UCSD.EDU

Subject: RACES Bulletin #274  
To: info-hams@ucsd.edu

Bid : \$RACESBUL.274

TO: ALL EMERGENCY MANAGEMENT AGENCIES VIA AMATEUR RADIO  
INFO: ALL RACES OPERATORS IN CA (ALLCA: OFFICIAL)  
ALL AMATEURS U.S. (@ USA: INFORMATION)  
FROM: CA STATE OFFICE OF EMERGENCY SERVICES (W6HIR @ WA6NWE.CA)  
2800 Meadowview Rd., Sacramento, CA 95832 (916)262-1600  
Landline BBS open to all: (916) 262-1657

RACESBUL.274 DATE: May 17, 1993

SUBJECT: MGT - The committed volunteer - Part 3/3

Other people may serve only when they are needed to perform INFREQUENT and usually unscheduled tasks. A few examples include extra operators for a major incident, installation or maintenance activity, computer programmers, special projects, etc. I use as an example one volunteer we have who is a computer communications program expert. If a terminal hangs up we may need his advice fast. One phone call and the problem is usually cleared in minutes. His advice is invaluable and priceless. He does not come in to the office and serve. He may respond into the field on an incident perhaps once a year. But you can see how it's impossible to put a price tag on his value to us without his having to meet radio nets or serve some expected hours per month.

You and, more importantly, your Radio Officer will know the capabilities and talents of each volunteer. It's your Radio Officer's responsibility to recruit enough people with the likes and skills to provide depth and redundancy.

As your Radio Officer's supervisor it is your role to motivate, lead and inspire. Let your volunteers be the best they can be --- and they will!

--- Stan Harter, KH6GBX

EOM

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RACES Bulletins are archived on the Internet at ucsd.edu in hamradio/races and can be retrieved using FTP.

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Date: Thu, 27 May 1993 13:05:46 GMT  
From: world!mulvey@uunet.uu.net  
Subject: Some advice on soldering coaxial cable  
To: info-hams@ucsd.edu

Regarding soldering pl-259 connectors:

You should also consider getting one of the \$10.00 butane torches sold by Radio Shack. They work nicely for heating up the braid fast. :-)

- Rich

--

Rich Mulvey	mulvey@world.std.com	"A thing of beauty is a joy forever:
{&&,   }	73476.1142@compuserve.com	its loveliness increases; it will
Katy Mulvey	( The new Mrs Mulvey! :-)	pass into nothingness..."

-----  
Date: 27 May 93 12:02:17 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: WANTED: NOAA/SAT INFO  
To: info-hams@ucsd.edu

In a recent positing, John Herndon asked about NOAA satellite frequencies, formats, and tracking.

John, the most comprehensive single source for current weather satellite information is Weather Satellite Report, a bi-monthly journal. A sample copy may be requested from the publisher, R. Myers Communications, P.O. Box 17108, Fountain Hills, AZ, 85269-7108; voice 602-837-6492; FAX 602-837-6872.

Several satellite tracking programs are available for determining positions of the satellites in real time. All of them can track multiple satellites on a text screen. If you want to see multiple satellites on a map, try RealTrak; it can show up to 6 satellites with their "footprints" (areas of coverage) at a time on its Mercator projection. For address/telephone, see below :)

Cheers - MRO

\*\*\*\*\*  
Michael R. Owen, Ph.D. a.k.a.: W9IP  
Department of Geology Northern Lights Software  
St. Lawrence University Star Route, Box 60  
Canton, NY 13617 Canton, NY 13617  
(315) 379-5975 - voice - (315) 379-0161 (6-9pm)  
e-mail: MOWE@SLUMUS FAX - (315) 379-5804  
\*\*\*\*\*

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Date: Thu, 27 May 1993 13:16:48 GMT  
From: swrinde!cs.utexas.edu!asuvax!ukma!rsg1.er.usgs.gov!resdgs1.er.usgs.gov!  
tbodoh@network.UCSD.EDU  
Subject: WANTED: NOAA/SAT INFO  
To: info-hams@ucsd.edu

In article <C7nJJJo.HAr@eis.calstate.edu>, jherndo@eis.calstate.edu (John Herndon) writes:

```
|> I'm looking to find out which NOAA satellites are currently functioning
|> (as far as sending down transmissions of satellite views) and what
|> frequencies are they using.
|>
|> Also, which satellites use APT to send data? What are their frequencies?
|>
|> Any other freqs. or sat information would be greatly appreciated!
|>
|> Oh, also.. are there any satellite tracking programs that can track
|> multiple satellites at once?
|>
|> --
|>      (-----)
|>      ( -> John W. Herndon  //  Internet: jherndo@eis.calstate.edu <- )
|>      (-----)
|>      ("I may not be an expert, but I'll do everything I can to help!")
|>      (-----[JWH]-)
```

--

I support the satellite tracking and acquisition software here. We currently receive data from NOAA 11 and 12. NOAA 9 and 10 are still flying but I believe that both have experienced some problems and are no longer used - although I suspect that live transmissions are still working. The record and playback functionality seems like it's the first thing to fail - or to get shut down due to power problems.

HRPT is the type of data which most people are interested in. LAC refers to HRPT data which is captured on tape over remote parts of the world and then played back when it comes back around. GAC data is also recorded but the path is longer and narrower than HRPT or GAC. Since most people do not have access to the recorder schedules, live HRPT is the most popular. We have the capability to receive all three - but LAC and GAC are relayed to us by NOAA. We do not currently capture GAC. We also have a cooperative project with many other tracking stations worldwide in order to get daily global land coverage of AVHRR data.

Looking in the owners manual, the HRPT downlink frequency is either 1698, 1707 or 1702.5 Mhz. The 1702.5 is only used in case of the failure of the primary transmitters.

In order to track several satellites at once, you would need multiple antennas, receivers, frame & bit synchronizers and interface boards. We do receive up to two at once - but one is actually tracked while the other is relayed to us from NOAA via a stationary relay satellite. Our tracking is done by known path, not by signal - so timing is very important. Due to this and the fact that the onboard clocks are often off by up to two seconds, we also have an NBS time receiver which we poll at the beginning of each pass in order to determine the time correction to be applied to each data line. We save these delta corrections in a file so that we can later correct recorded data relayed by NOAA and our cooperators.

Other satellites that are up there are SPOT, LANDSAT and GOES. We are a national archive for Landsat data and are slated to be the archive and distribution site for Landsat VII. SPOT is a French satellite which we do not use. GOES satellites are geostationary weather satellites that offer very wide coverage - you can actually see the entire globe. The NASA EOS project will drastically increase the quality and quantity of remote sensing data - and we will be involved in that project as well. There's a lot up there with a lot more to come. Bye...

```
+++++
+ Tom Bodoh - Sr. systems software engineer
+
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198      (605) 594-6830      +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66)
+
+ "Welcome back my friends to the show that never ends!" EL&P
+
+++++
```

-----

Date: 27 May 1993 12:54:35 GMT  
From: vtserf.cc.vt.edu!usenet@uunet.uu.net  
Subject: Wanted: QSL route for P02CRL  
To: info-hams@ucsd.edu

I'm looking for a QSL route for P02CRL who I worked on  
80M CW the other night. Any help is appreciated.

73,  
Benjy AC4X0

-----

Date: 27 May 93 06:15:42 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: xraying HTs (was airlines)

To: info-hams@ucsd.edu

>Not sure I understand what could happen to static ram? It loses its memory  
>when power is off anyway? Don't know how NVRAM works, but assume that it  
>must be something like eeproms, or perhaps ram that retains its memory via  
>capacitive static charge. I had always assumed that freqs were  
>stored in HTs using eeproms, but perhaps another technology is used, if so,  
>how does it work. My wife carried her HT on a plane once, and sent it through  
>the x-ray conveyor. When she tried to use it (once off the plane), it was  
>totally messed up! It still had the freqs programmed in, but it was  
>locked into transmit mode, yet not transmitting, could not receive anything  
>on any freq (not even static if I remember what she told me correctly).  
>S

Some equipment uses static ram backed up by batteries constantly to hold some information (perhaps the frequencies in the radio, maybe the radio's current state - i.e. TX on, PL tone, etc). I'm told that some electronic cameras have their whole operating system in static ram with the normal battery and a special memory backup battery in parallel - instead of an EPROM (don't know why, so the answer must be CHEAPER. Some older ham gear used to do that - when the backup battery failed, your rig went dead. Not nice.) So when your fancy camera goes through the xray the film is fine but if you lose a bit in the static ram, the camera's microprocessor goes out in the weeds for good, or until you send it to the factory to be reprogrammed. Probably the same thing happened to your wife's ht, but fortunately the main functions were stored in an EPROM or something that is more resistant to soft xrays.

The mechanism as I understand it is that a bit is held as a small charge on a tiny cap on the input of an FET. The xray just happens to pass through the charged area, ionizing it and dissipating this tiny charge and the bit goes to the opposite state. If it's a frequency it's a pain. But if it's an instruction in your system code - you're dead in the water. So I don't xray my ht's. Could probably do it a zillion times without trouble - but if it gets hit it'll be a pain and I'll never recover the repair cost from the airline.

73 de Kevin, WB2EMS

-----  
Date: Thu, 27 May 1993 15:42:12 GMT  
From: swrinde!gatech!darwin.sura.net!rsg1.er.usgs.gov!resdgs1.er.usgs.gov!  
tbodoh@network.UCSD.EDU  
Subject: xraying HTs (was airlines)  
To: info-hams@ucsd.edu

In article <199305271515.AA01558@postoffice.mail.cornell.edu>, fkf1@cornell.EDU

(F. Kevin Feeney) writes:

|> >Not sure I understand what could happen to static ram? It loses its memory  
|> >when power is off anyway? Don't know how NVRAM works, but assume that it  
|> >must be something like eeproms, or perhaps ram that retains its memory via  
|> >capacitive static charge. I had always assumed that freqs were  
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|> >how does it work. My wife carried her HT on a plane once, and sent it through  
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|> >totally messed up! It still had the freqs programmed in, but it was  
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|> >S  
|>  
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|> current state - i.e. TX on, PL tone, etc). I'm told that some electronic  
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|> battery and a special memory backup battery in parallel - instead of an  
|> EPROM (don't know why, so the answer must be CHEAPER. Some older ham gear  
|> used to do that - when the backup battery failed, your rig went dead. Not  
|> nice.) So when your fancy camera goes through the xray the film is fine but  
|> if you lose a bit in the static ram, the camera's microprocessor goes out in  
|> the weeds for good, or until you send to the factory to be reprogrammed.  
|> Probably the same thing happened to your wife's ht, but fortunately the  
|> main functions were stored in an EPROM or something that is more resistant  
|> to soft xrays.  
|>  
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|> instruction in your system code - you're dead in the water. So I don't xray  
|> my ht's. Could probably do it a zillion times without trouble - but if it  
|> gets hit it'll be a pain and I'll never recover the repair cost from the  
|> airline.  
|>  
|> 73 de Kevin, WB2EMS  
|>

--

The problem - especially in international airports is that the bozos who run the x-ray gear have absolutely no concept of what it can do even though they claim to be experts - and they have the final say on whether you can hand off a piece of equipment rather than x-ray it. Their standard answer for cameras is "won't hurt it" but it will fog film of ASA 1000 or higher - some airports have finally admitted this and put up signs to that effect. I am not confident that any airport security personell really understand or care about what can happen to electronic equipment. Anybody have any ideas

how best to handle this when you are trying to catch your flight? I can appreciate their efforts to keep planes from going boom, but their actions can be costly. I WILL not put my electronic gear in checked luggage - which I suspect gets x-rayed anyway. Bye...

```
+++++
+ Tom Bodoh - Sr. systems software engineer
+
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198      (605) 594-6830      +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66)
+
+ "Welcome back my friends to the show that never ends!" EL&P
+
+++++
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End of Info-Hams Digest V93 #648  
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